

- 1 -

piece 1, NC_000913, fhuF_yjjZ+, config: linear, direction: +, begin: 4603657, end: 4603846

Sequence alignment of the first 100 amino acids of the 16S rRNA gene across 10 samples. The sequence starts with Met (fMet). Red dots indicate variations between samples.

[NC_000913.fna]

10 Jun 2023 10:44:44 ir fhuF_yjjZ+

```
-----} sd-(13)-ir 4603706 Gap 4.6 bits  
-----| sd-ir 4603706 fhuF_yjjz+ total 9.0 bit
```

Genomic sequence diagram for the *yjjZ* gene. The top part shows the DNA sequence with start sites (*), reading frames (colored arrows), and stop sites (asterisks). Below the sequence, amino acid translations are shown for each reading frame. A red box highlights the first 14 codons. The bottom part shows domain predictions: a purple box for p35 (3.3 bits), a green box for *ir*, and a yellow box for *fhuf_yjjZ+*. A legend indicates: red = hydrophobic, blue = hydrophilic, green = polar, yellow = aromatic.

[###> orf 7 codons

... sc

.4 bits
+ total 9.1 bits

{ ----- ... sd-(11)-ir 4603827 Ga

The diagram illustrates the sequence **p35-p10** with a total length of **4.2 bits**. It is composed of two main segments: **p35** (6.1 bits) and **p10** (3.3 bits). The **p35** segment is further divided into two regions: a purple region and a cyan region. A dashed line indicates a gap of **2.4 bits** between the end of **p35** and the start of **p10**, which is also labeled as **4603780**.

The diagram illustrates a DNA sequence structure with the following components:

- p35-(21)-p10**: A purple box representing a 21-base pair (bp) insertion.
- 4603783**: A blue box representing a 10-base pair (bp) insertion.
- Gap 3.3 bit**: A green box representing a gap of 3.3 bits.
- p35-p10**: A red box representing the 10-base pair (bp) insertion.
- 4603783 total**: The total length of the sequence, 6.3 bits.
- p10 6.3 bits**: The total length of the p10 component, 6.3 bits.

p10 6 4 bit

{- p35-(22)-p10 4603788 Gap 2.3 bit
| - p35-p10 4603788 total 10.2 bits

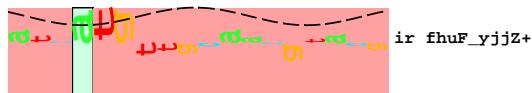
{-----} p35-(25)-p10 4603791 Gap 4.0 bits
{-----} p35-p10 4603791 total 4.5 bits

5' *4603820 *4603830 *4603840 3'
 atgaaaatcatgttgcacagttacgcctggg
 met-lys-ser-cys-cys-asn-val-arg-trp- - - - -
 - glu-ile-met-leu-gln-arg-thr-leu- - - - -

11. The is five viz.

sd

[----- ... NC_000913.yjjz - 2 -



... } sd-(11)-ir 4603827 Gap 3.0 bits
... -----| sd-ir 4603827 fhuF_yjjZ+ total 8.5 bits